



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCT04018	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/KR2004/002725	International filing date(day/month/year) 26 OCTOBER 2004 (26.10.2004)	Priority date (day/month/year) 29 OCTOBER 2003 (29.10.2003)	
International Patent Classification (IPC) or national classification and IPC E06B 7/02(2006.01)i			
Applicant LEE, Byung-su			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 01 AUGUST 2005 (01.08.2005)		Date of completion of this report 21 FEBRUARY 2006 (21.02.2006)	
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer KIM, Hyun Woo Telephone No. 82-42-481-5795 	

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International application No.

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Box No. 1 Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	1-6	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	2-6	YES
	Claims	1	NO
Industrial applicability (IA)	Claims	1-6	YES
	Claims	NONE	NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1: KR 1998-0134598 Y (NAM, KI-HONG) 23 October 1998
D2: KR 2001-0249221 Y (JEONG, SANG-HO) 24 September 2001
D3: KR 2003-0316927 Y (KIM, SUNG-WOO) 05 June 2003
D4: JP 03-005647 A (MATSUSHITA SEIKO CO., LTD.) 11 January 1991

1. Novelty

The present invention relates to an automatic air purifying window, wherein induction and discharge parts are formed at a window stile to induce and discharge indoor and outdoor air, a purification cartridge is embedded at an inner portion of a lower window stile, and a filter is formed at the purification cartridge so that the air induced through an indoor air induction port can be induced into the room after passing through the filter.

The invention claimed in claim 1 of the present application differs from those of D1 and D2 in the purification cartridge, and differs from those of D3 and D4 in the frame, the discharge part, and the light transmission portion. Therefore, the subject matter of claim 1 is considered to be novel.

Since claims 2-6 refer directly or indirectly to claim 1, the subject matter of claims 2-6 is also considered to be novel.

2. Inventive Step

D1 and D2 relate to an air shaft for windows which is formed at a window frame for ventilation. The present invention differs from the cited inventions of D1 and D2 in purifying air using a filter. However, purifying air using a filter is disclosed in D3 and D4.

Therefore, the subject matter of claim 1 is considered to lack an inventive step as being obvious over a simple combination of D1 and D4 or D2 and D3.

The activated carbon contained in the purification cartridge, and the photocatalyst coating the purification cartridge as set forth in claim 2 are not described in the cited documents. Accordingly, the invention claimed in claim 2 differs from those of D1-D4 in said technical features. In addition, said technical features produce an effect in automatically purifying polluted indoor air. Therefore, the subject matter of claim 2 is considered to involve an inventive step.

(Continued on Supplemental Sheet.)

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Box V.

The plurality of skew plates of claim 3, each of which is provided at the discharge passageway formed inside the upper guide member and at the fluid passageway formed inside of the lower guide member, are not described in D1-D4. Accordingly, the invention claimed in claim 3 differs from those of D1-D4 in said technical features. In addition, said technical features produce an effect in preventing outdoor noise from being transmitted to an indoor place. Therefore, the subject matter of claim 3 is considered to involve an inventive step.

The subject matter of dependent claims 4-6 which refers directly or indirectly to claim 3 is also considered to involve an inventive step.